

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

Application of: Ruben et al.

Application Number: to be assigned

Group Art Unit: to be assigned

Filed: herewith

Examiner: to be assigned

Title: 67 Human Secreted Proteins

Attny. Docket No. PZ023P1C1

**PRELIMINARY AMENDMENT**

Assistant Commissioner for Patents  
Washington, D.C. 20231

Sir :

Prior to the prosecution of the above-captioned application, please enter the following amendments. Applicants submit concurrently herewith a copy of the Petition for Extension of Time under 37 C.F.R. § 1.136 ("Petition") filed in connection with parent application no. 09/363,044, which extends the time from November 28, 2000 to and including March 28, 2001. This Petition evidences copendency between parent application Serial No. 09/363,044 and the present application.

***Amendments***

**In the Specification**

Please replace the first paragraph on page 1 with the following rewritten paragraph:

-- This application is a continuation application of U.S. Application No. 09/363,044, filed July 29, 1999, which is a continuation-in-part of, and claims benefit under 35 U.S.C. § 120 of copending United States patent application Serial No: PCT/US99/01621, filed January 27, 1999, which is hereby incorporated by reference,

which claims benefit under 35 U.S.C. § 119(e) based on U.S. Provisional Applications: --

### **In the Claims**

Please amend the claim 17 as follows:

17. (Amended) A method for preventing, treating, or ameliorating a medical condition, comprising administering to a mammalian subject a therapeutically effective amount of the polypeptide of claim 1.

Please add the following claim:

-- 24. A method for preventing, treating, or ameliorating a medical condition, comprising administering to a mammalian subject a therapeutically effective amount of the polynucleotide of claim 1. --

### **REMARKS**

The specification has been amended to add priority information. The claims have been amended to more particularly point out and distinctly claim the subject matter applicants regard as the invention. Support for new claim 24 can be found throughout the application as filed. Attached hereto is a marked-up version of the changes made to the specification and claims by the current amendment. The attached page is captioned "Version with markings to show changes made".

No new matter has been introduced.

Applicants believe that no fee is required for this submission. However,

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VERSION WITH MARKINGS TO SHOW CHANGES MADE

**In the Specification**

On page 1, the first paragraph has been changed as follows:

This application is a continuation application of U.S. Application No. 09/363,044, filed July 29, 1999, which is a continuation-in-part of, and claims benefit under 35 U.S.C. § 120 of copending United States patent application Serial No: PCT/US99/01621, filed January 27, 1999, which is hereby incorporated by reference, which claims benefit under 35 U.S.C. § 119(e) based on U.S. Provisional Applications:

**In the Claims:**

Claim 17 has been amended as follows:

17. (Amended) A method for preventing, treating, or ameliorating a medical condition, comprising administering to a mammalian subject a therapeutically effective amount of [the polypeptide of claim 11] the polynucleotide of claim 1.

## 67 Human Secreted Proteins

This application is a continuation-in-part of, and claims benefit under 35 U.S.C. § 120 of copending United States patent application Serial No: PCT/US99/01621 filed January 27, 1999, which is hereby incorporated by reference, which claims benefit under 35 U.S.C. § 119(e) based on U.S. Provisional Applications:

	Appln No.	Filing Date
1.	60/073,160	30-Jan-1998
2.	60/073,159	30-Jan-1998
3.	60/073,165	30-Jan-1998
4.	60/073,164	30-Jan-1998
5.	60/073,167	30-Jan-1998
6.	60/073,162	30-Jan-1998
7.	60/073,161	30-Jan-1998
8.	60/073,170	30-Jan-1998

### Field of the Invention

This invention relates to newly identified polynucleotides and the polypeptides encoded by these polynucleotides, uses of such polynucleotides and polypeptides, and their production.

### Background of the Invention

Unlike bacterium, which exist as a single compartment surrounded by a membrane, human cells and other eucaryotes are subdivided by membranes into many functionally distinct compartments. Each membrane-bounded compartment, or organelle, contains different proteins essential for the function of the organelle. The cell uses "sorting signals," which are amino acid motifs located within the protein, to target proteins to particular cellular organelles.

One type of sorting signal, called a signal sequence, a signal peptide, or a leader sequence, directs a class of proteins to an organelle called the endoplasmic reticulum (ER). The ER separates the membrane-bounded proteins from all other types of proteins. Once localized to the ER, both groups of proteins can be further directed to another organelle called the Golgi apparatus. Here, the Golgi distributes the proteins to vesicles, including secretory vesicles, the cell membrane, lysosomes, and the other organelles.

Proteins targeted to the ER by a signal sequence can be released into the extracellular space as a secreted protein. For example, vesicles containing secreted proteins can fuse with the cell membrane and release their contents into the extracellular space - a process called exocytosis. Exocytosis can occur constitutively or after receipt of a triggering signal. In the latter case, the proteins are stored in secretory vesicles (or secretory granules) until exocytosis is triggered. Similarly, proteins residing on the cell membrane can also be secreted into the extracellular space by proteolytic cleavage of a "linker" holding the protein to the membrane.

Despite the great progress made in recent years, only a small number of genes encoding human secreted proteins have been identified. These secreted proteins include the commercially valuable human insulin, interferon, Factor VIII, human growth hormone, tissue plasminogen